#### **Chief Patrons**

Dr.P.Chinnadurai, M.A., M.Phil, Ph.D, Secretary & Correspondent

### **Patrons**

Dr. C. Sakthi Kumar M.E, Ph.D, Director Mrs.C.Vijayarajeswari, Director Dr.Saranya Sree Sakthi Kumar B.E,M.B.A,Ph.D. Director

### Co-Patron

Dr. K.Mani, M.E, Ph.D, Principal Dr.S.Prasanna Devi M.E,Ph.D,PDF(IISc) Chief Academic Officer

### Conveners

Dr.L.Jabasheela, M.E, Ph.D, Professor & HOD-CSE Dr.P.J.Sathish Kumar, M.E, Ph.D, Professor, CSE

# Co-Conveners

Dr.Kavitha Subramani, M.E, Ph.D, Professor, CSE Dr. V. Subedha, M.E, Ph.D, Professor, CSE Dr.G.Senthil Kumar, M.E, Ph.D, Professor, CSE

# **Organizing Committee**

Dr.Umarani Srikanth, M.E, Ph.D, Professor, CSE Dr.S.Balaji, Professor, M.E, Ph.D, CSE Dr.A.Hemlathadhevi, M.E, Ph.D, Professor, CSE

### **IMPORTANT DATES**

Last date for receiving application: 20-11-2025 (By Email)

Intimation of selection: 30-11-2025

REGISTRATION

**Registration fees:** NIL

Last Date of Registration: 25-11-2025

Confirmation of participants will be made after the registration. Selection is done in a first come first served basis.

### **About the FDP**

The objective of the ATAL Faculty Development Program (FDP) on Quantum Intelligence: Al-Quantum Convergence in Cyber Defence and Technologies is to equip faculty members with foundational and advanced knowledge at intersection of Artificial Intelligence (AI) and Quantum Computing. This program aims to explore how quantum-enhanced AI can transform cyber defence systems and space technologies through secure communication, quantum cryptography, intelligent autonomous platforms. Participants will gain insights into quantum machine learning, quantum algorithms, and their applications in threat detection, satellite data processing, and real-time decisionmaking.

### **ELIGIBILITY**

Participants should be faculty/research scholar in any University/Institution and from Industries.

### For Further Details/Registration **The Convener**

# (FDP ON Quantum Intelligence: AI-Quantum Convergence in Cyber Defence and Space Technologies)

Department of Computer Science & Engineering Panimalar Engineering College, Bangalore Trunk Road, Varadharajapuram, Poonamallee, Chennai, Tamil Nadu - 600123 E-mail: csehod@panimalar.ac.in

Mobile: 9962723582, 91769882281

# **For Registration**



https://atalacademy.aicte.gov.in/login

Signup with User Name & Password













# FACULTY DEVELOPMENT PROGRAM

On

"Quantum Intelligence: Al-Quantum **Convergence in Cyber Defence & Space Technologies**"

> 1st - 6th December 2025 **Organized By**

**Department of Computer Science & Engineering** 

## PANIMALAR ENGINEERING COLLEGE

(An Autonomous Institution Affiliated to Anna University Chennai) **Approved by AICTE New Delhi & Accredited by NBA** 

Bangalore Trunk Road, Varadharajapuram, Poonamallee, Chennai - 600 123. Website: www.panimalar.ac.in

## **COLLEGE PROFILE**

Panimalar Engineering College, a Christian Minority Institution of Higher Education governed by JAISAKTHI Educational Trust aims at imparting quality engineering education for the aspiring youth.

The College is accredited by National Board of Accreditation (NBA), New Delhi, approved by All India Council for Technical Education (AICTE) and recognized by UGC with 12(B) & 2(f) status. The college is located near Poonamallee, Chennai, and is well connected by road covering, Chennai, Kancheepuram and Thiruvallur districts. The Trust started Panimalar Engineering College in the year 2000 in accordance with the general policy of the Government of Tamilnadu. The policy emphasizes to give high priority to meet the demand for trained engineers for various industrial and development projects in the state of Tamilnadu and the rest of India.

B.E. - Computer Science & Engineering

**B.E - Electronics & Communication Engineering** 

B.E - Electrical & Electronics Engineering

**B.E - Mechanical Engineering** 

B.Tech. - Information Technology

**B.Tech - Computer Science & Business Systems** 

B.Tech - Artificial Intelligence & Data Science

B.Tech - Artificial Intelligence & Machine Learing

M.E. - Computer Science and Engineering

M.E. - Communication System

M.B.A. - Master of Business Administration

The college maintains high standard of education by providing a wide array of world class of academic facilities, employing highly qualified and experienced faculty members and creating an ambience conducive of quality education.

## Location

The college maintains high standard of education by providing a wide array of world class of academic facilities, employing highly qualified and experienced faculty members and creating an ambience conducive of quality education.

### **ABOUT THE DEPARTMENT**

The Computer Science and Engineering Department offers both Undergraduate ,Postgraduate & Ph.D programs. It provides an excellent ambiance for students to learn and acquire the necessary skills required by the IT Industry. Technological innovation is so rapid in this field that continuous education is essential to enhance the skill set of students keeping in pace with the current trends.

The department has experienced faculty members who are fully committed to teaching and research.

The students have access to well equipped, state-of-the-art laboratories. A wide range of activities undertaken in the department allow the students to gain contemporary knowledge of the basic problems in the IT industry. The advance curriculum requires the students to take up a broad spectrum of courses with special emphasis on desired areas of specialization.

### **VISION OF THE DEPARTMENT**

 To create a dynamic academic environment that nurtures technologically proficient individuals with a spirit of research, innovation and effective communication while instilling strong social awareness and national responsibility, enabling them to excel in the field of Computer Engineering.

### **MISION OF THE DEPARTMENT**

M1: To establish a dynamic academic environment with dedicated faculty and modern resources, fostering expertise in both fundamental concepts and emerging computing domains.

**M2:** To equip students with industry-relevant skills, critical thinking abilities, and leadership qualities, while instilling ethical values and a sense of responsibility through knowledge dissemination and technological advancements for societal progress..

**M3**: To drive collaborative innovation through partnerships with academia and industry, ensuring seamless exchange of expertise, leading to intellectual property creation, product development, commercialization, and sustained research funding.

## **TOPICS TO BE COVERED**

- Quantum Computing in Revolution of Al.
- Quantum Al Convergence.
- Quantum Architecture Model.
- Basics of Quantum Operators & Universality.
- Quantum AI for Cyber Physical Systems.
- Quantum Machine Learning.
- Quantum Drones for Defence Surveillance.
- Quantum Algorithms for Space Data Analysis

### **RESOURCE PERSON**



PROF. SARDAR M. N. ISLAM (NAZ)
Ph.D., LL.B. (Law)
Professor
Victoria University, Australia.



Dr.HIMANI SAINI.,M.S.,Ph.D., Scientist, SF, ISRO



Dr.THINAGARAN PERUMAL, PhD, SMIEEE
Associate Professor& Head
Department of Computer Science
Universiti Putra Malaysia



Dr. JAYAKUMAR
VAITHIYASHANKAR,Ph.D.,
IBM Quantum Educator, CEO,
Anuthantra pvt Ltd Bangalore



Dr.M.SHYAMALA DEVI.,M.E.,Ph.D Post Doctoral Research Professor, Kyungpook National University, Republic of Korea



Mr.MAHENDRAN E., B.E.,M.E.,
Scientist, CDAC